DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 70.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-008819
Date Inspected: 31-Aug-2009

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Japan Steel Works

OSM Arrival Time: 700
OSM Departure Time: 1630
Location: Muroran, Japan

CWI Name: Chung Fu Kuan

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Tower, Jacking, and Deviation Saddles

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Art Peterson was present during the times noted above for observations relative to the work being performed in Fabrication shop #4 and the Foundry at Japan Steel Works.

Fabrication Shop #4:

Grinding Operation completed on Saddle: Tower Saddle Segment T1-3

The QA Inspector observed that JSW personnel completed the grinding operation on the excess material located on the edge of the rib plates where the temporary attachments were welded to the edge of the rib plates. The next operation to be performed is the magnetic particle test (MPT) inspection by the dry method on the partial-joint penetration (PJP) groove and fillet welds of the stiffener plates by the Nikko Inspection Services (NIS) Quality Control (QC) Non-Destructive Testing (NDT) personnel.

Final Post Weld Heat Treatment Operation pending on Saddle: West Deviation Saddle Segment W2-W3

The QA Inspector observed that west deviation saddle segment W2-W3 is in preparation to have the final post weld heat treatment (PWHT) stress relief operation performed on the saddle segment.

Fillet Weld Operation in-process on Pipe Sleeves for the West Deviation and West Jacking Saddles

The QA Inspector observed the fillet weld operation being performed on the pipe sleeves- ASTM A709M Grade 345 steel flanges fit-up to each end of the ASTM A106 (2") schedule 80 pipe to the lengths of (1008.7), (1019.0), and (1020.7) mm (+ 0 / - 3) for the west deviation and the west jacking saddles. The QA Inspector observed Quality Control (QC) Inspector Mr. Chung Fu Kuan verify prior to and during the fillet weld operation that the

minimum preheat temperature of 110 degrees Celsius was maintained and the welding parameters of JSW welding personnel Mr. M. Yamashita (73-4195) were in compliance with WPS SJ-3177-5 per the SMAW process in the (2F and 3F) horizontal and vertical positions using (4.0) mm diameter LB52 electrode. The QA Inspector observed that the fillet weld operation was in-process on the pipe sleeves at the end of the QA Inspectors' shift.

Foundry:

Layout Operation in-process on Saddle: East Saddle E2-E1 (cast saddle)

The QA Inspector observed Nikko Inspection Services (NIS) Non-Destructive Testing (NDT) Quality Control (QC) Inspector Mr. H. Kohama in preparation to performing the magnetic particle test (MPT) inspection and ultrasonic test (UT) inspection on east saddle E2-E1 by first (laying out) marking (300 x 300) mm grid lines on the rib sections, stem section, and the interior and exterior of the trough for record purposes, identity and guidance in scanning. The QA Inspector observed that the layout operation was in-process on east saddle E2-E1 by the end of the QA Inspectors' shift.

NDT Operation completed on Cast Saddle: West Jacking Saddle

The QA Inspector observed that Nikko Inspection Services (NIS) Quality Control (QC) Non-Destructive Testing (NDT) Inspector Mr. A. Seino (#82) completed the liquid penetrant test (PT) re-inspection on the ground out excavated areas for the (4th time) to ensure the complete removal of defects at various locations on the outside of the trough section, stem section and rib sections of the west jacking saddle. The QA Inspector also observed that the magnetic particle test (MPT) inspection by the (wet method) was completed on the excavated areas as per JSW's manufacturers procedure plan (MPP) for the west jacking saddle.

Unless otherwise noted, all observations reported on this date appeared to be in general compliance with the applicable contract specifications.

Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy at (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Peterson,Art	Quality Assurance Inspector
Reviewed By:	Guest,Kittric	QA Reviewer